



UNITED STATES PATENT AND TRADEMARK OFFICE

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DEC 18 2001

OFFICE OF PETITIONS

In re application of

Paul R. Johannessen

Serial No. 09/922,283

Art Unit:

Filed: August 3, 2001

Examiner:

For: METHOD OF HIGH-POWER SWITCHING AND SWITCH APPARATUS FOR FREQUENCY
MODULATION WITHIN LORAN-C SIGNALS

Honorable Commissioner of Patents
And Trademarks
Washington, DC 20231

Sir:

PETITION UNDER 37 C.F.R. SEC. 1.137(b)
TO REVIVE UNINTENTIONALLY ABANDONED APPLICATION

Honorable Commissioner of Patents
and Trademarks
Washington, D.C. 20231

Sir:

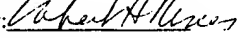
Applicant hereby petitions the Commissioner to revive the above-identified application as a pending application and to permit the filing of missing page 11 (copy enclosed). Counsel never received said Notice to File Corrected Application Papers dated September 14, 2001 with the requirement neither for submission of page 11 nor for submission of formal drawings, we did, however, receive the filing receipt dated September 14, 2001, pages 1-3 (copies enclosed). The abandonment of the application was unintentional.

Also enclosed are copies of formal drawings submitted to the Patent Office under date of November 9, 2001.

The Commissioner is hereby authorized to charge the petition fee and any additional fees that may be required in this connection to the deposit account No. 18-1425 of the undersigned attorneys.

Respectfully submitted,

RINES AND RINES

By: 
Robert H. Rines
Registration No. 15,932

Date: December 12, 2001
RINES AND RINES
81 North State Street
Concord, NH 03301
Tel: (603) 228-0121

0300 \$
#5PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:
Paul R. Johannessen

Serial No: 09/922,283

Group Art Unit:

Filed: August 3, 2001

Examiner:

For: METHOD OF HIGH-POWER SWITCHING AND SWITCH APPARATUS FOR
FREQUENCY MODULATION WITHIN LORAN-C SIGNALS

PETITIONHonorable Commissioner of Patents
and Trademarks
Washington, D.C. 20231

Sir:

In response to a Notice to File Corrected Application Papers dated September 14, 2001, applicant hereby petitions the Commissioner to accept the enclosed copy of the "missing" page 11 of the specification with the statement that said page 11 was indeed included with the entire application as filed under date of August 3, 2001 according to our records.

The Commissioner is hereby authorized to charge the \$130.00 Petition Fee (under CFR 1.17(h), to the deposit account No. 18-1425 of the undersigned attorney.

09/21/2001 MWLDER1 00000040 181425 09922283
01 FC:122 130.00 CH

Respectfully submitted,

RINES AND RINES

By: 
Robert H. RinesDate: September 18, 2001
RINES AND RINES
81 North State Street
Concord, NH 03301
Tel: (603) 228-0121



Amendment A

Paper No. 3

UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:

Paul R. Johannessen

Serial No. 09/922,283

Art Unit:

Filed: August 3, 2001

Examiner:

For: METHOD OF HIGH-POWER SWITCHING AND SWITCH APPARATUS FOR
FREQUENCY MODULATION WITHIN LORAN-C SIGNALS

* * *

Hon. Commissioner of Patents
and Trademarks
Washington, DC 20231

Dear Sir:

Please amend the above application to correct typographical errors and improve description
as follows:

Page 1, line 2, singularize "communications" to:--communication--.

Page 1, line 9, please correct "'4,800,341" to read:--4,800,391--.

Page 2, line 3 from the bottom, after "triggering" insert:-- on--.

Page 2, line 2 from the bottom, delete "on".

Page 2, last line, insert a period after "therein".

Page 3, line 1, transfer the new paragraph sentence reading "Preferred and best mode
configurations and designs are later detailed" to before the title "Drawings", line 4.

Page 3, line 5, delete "a".

Page 4, line 1, change "A' and B' " to:--A' and B'--.

Page 4, line 2, insert a comma after "closed".

Page 4, line 3, place the comma at the end of the formula, in-line with, but after "f_A".

Page 4, at end of the formula in line 14, insert a period.

Page 4, line 3 from the bottom, delete the subscript "1" after "SCR".

Page 5, line 8, correct "discovered" to read:--disclosed--.

Page 5, line 3 from the bottom, pluralize "diode" to:--diodes--.

Page 6, insert a period after the formula in line 4.

Page 6, line 9, change "increase" to:--increased--.

Page 6, line 3 from the bottom, insert a period after the formula.

Page 7, line 6, change "zero, the" to"--zero. The--.

Page 7, insert a period after the formula in line 4 from the bottom.

Page 7, line 2 from the bottom, insert a period after the formula.

Page 8, insert a period after the formula in line 3.

Page 8, insert a period after the formula in line 7.

Page 8, insert a period after the formula in line 10.

Page 8, line 11, after "currents" insert:--are--.

Page 8, line 3 from the bottom, insert a period after the formula.

Page 9, line 2, after "purpose" insert:--junction diode--.

Page 9, at the end of the line, insert:--the before-mentioned radio frequency half cycle,--.

Page 9, line 3, after "that" insert:--said diodes D₁ and D₄ do not stop conducting until--.

Page 9, line 3, change "must be" to:--are--.

Page 9, line 4, before the period, insert:--produced by the antenna current (i_A in Figure 5)--.

Page 9, insert a period after the formula in line 8.

Page 9, insert a comma at the end of line 3 from the bottom.

Page 9, line 10, after "L" insert:--(Figure 1)--.

Page 9, line 11, after "C" insert:--(Figure 4)--.

Page 12, line 3 from the bottom, delete "on".

Page 12, line 3 from the bottom, after "triggering" insert:-- -on--.

Page 12, last line, insert a period at the end.

Claim 1, line 8, delete "on".

Claim 1, line 8, after "triggering" insert:-- -on--.

Please add the following claims.

- 5. The apparatus of claim 1 wherein said frequency increasing or decreasing is effected by shorting out one of said series inductance and/or capacitance by said triggering of the bridge circuit, correspondingly to effect the frequency tuning for said frequency modulation--.
- 6. The apparatus of claim 5 wherein the high speed switching effects said shorting out in steps, with the switching time less than half-a-cycle of the antenna current.--

--7. The apparatus of claim 1 wherein the rectifiers of the bridge circuit are junction diodes having minority carrier recombination time long compared to the antenna radio-frequency current half-cycles, such that, in switching, the diodes do not stop conducting until almost all minority carriers in the diode junction are swept out by the reverse diode current produced by the antenna radio frequency current applied to the bridge circuit.--

REMARKS

In reviewing the application, it was deemed that more specific claims would also be desirable detailing the shorting of the series inductance or capacitance (pages 6-9 of the specification)--new dependent claims 5 and 6--and the minority carrier sweep out diode non-conducting delay, (top of page 9)--claim 7.

Any costs incurred by these amendments may be charged to account no. 18-1425 of the undersigned attorneys.

Very Respectfully,

Date: September 5, 2001
Rines and Rines
81 North State Street
Concord, NH 03301
Reg. No. 15,932
Tel. (603) 228-0121

By Robert H. Rines
Robert H. Rines
Attorney for Applicant
Reg. No. 15,932



UNITED STATES PATENT AND TRADEMARK OFFICE

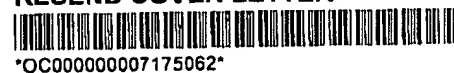
COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

| APPLICATION NUMBER | FILING DATE | FIRST NAMED APPLICANT | ATTY. DOCKET NO./TITLE |
|--------------------|-------------|-----------------------|------------------------|
| 09/922,283 | 08/03/2001 | Paul R. Johannessen | |

RINES AND RINES
81 North State Street
Concord, NH 03301

CONFIRMATION NO. 9705

RESEND COVER LETTER



OC000000007175062

Date Mailed: 12/10/2001

COVER LETTER FOR RESENDING CORRESPONDENCE

A courtesy copy of the Notice mailed on 09/14/2001 is enclosed. The time period for reply continues to run from the mail date of that Notice.

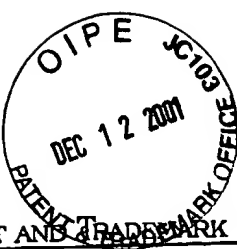
*A copy of this notice **MUST** be returned with the reply.*

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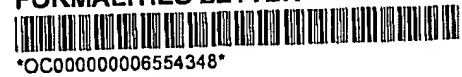
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| APPLICATION NUMBER | FILING/RECEIPT DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKET NUMBER |
|--------------------|---------------------|-----------------------|------------------------|
| 09/922,283 | 08/03/2001 | Paul R. Johannessen | |

CONFIRMATION NO. 9705

FORMALITIES LETTER



OC00000006554348

RINES AND RINES
81 North State Street
Concord, NH 03301

Date Mailed: 12/10/2001

NOTICE TO FILE CORRECTED APPLICATION PAPERS

Filing Date Granted

This application has been accorded an Application Number and Filing Date. The application, however, is informal since it does not comply with the regulations for the reason(s) indicated below. Applicant is given **TWO MONTHS** from the date of this Notice within which to correct the informalities indicated below. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a)

The required item(s) identified below must be timely submitted to avoid abandonment:

- Substitute drawings in compliance with 37 CFR 1.84 because:
 - drawing sheets do not have the appropriate margin(s) (see 37 CFR 1.84(g)). Each sheet must include a top margin of at least 2.5 cm. (1 inch), a left side margin of at least 2.5 cm. (1 inch), a right side margin of at least 1.5 cm. (5/8 inch), and a bottom margin of at least 1.0 cm. (3/8 inch);

The following item(s) appear to have been **omitted** from the application:

- Page(s) 11 of the specification (description and claims).

I. Should applicant contend that the above-noted omitted item(s) was in fact deposited in the U.S. Patent and Trademark Office (USPTO) with the nonprovisional application papers, a copy of this Notice and a petition (and \$130.00 petition fee (37 CFR 1.17(h))) with evidence of such deposit **must** be filed within **TWO MONTHS** of the date of this Notice. The petition fee will be refunded if it is determined that the item(s) was received by the USPTO.

II. Should applicant desire to supply the omitted item(s) and accept the date that such omitted item(s) was filed in the USPTO as the filing date of the above-identified application, a copy of this Notice, the omitted item(s) (with a supplemental oath or declaration in compliance with 37 CFR 1.63 and 1.64 referring to such items), and a petition under 37 CFR 1.182 (with the \$130.00 petition fee (37 CFR 1.17(h))) requesting the later filing date **must** be filed within **TWO MONTHS** of the date of this Notice.

III. The failure to file a petition (and petition fee) under the above options (I) or (II) within **TWO MONTHS** of the date of this Notice (37 CFR 1.181(f)) will be treated as a constructive acceptance by the applicant of the application as deposited in the USPTO. **THIS TWO MONTH PERIOD IS NOT EXTENDABLE UNDER 37 CFR 1.136(a) or (b).** In the absence of a timely filed petition in reply to this Notice, the application will maintain a filing date as of the date of deposit of the application papers in the USPTO, and original application papers (i.e., the

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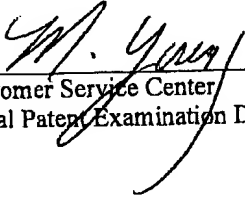
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original disclosure of the invention) will include only those application papers present in the USPTO on the date of deposit.

In the event that applicant elects not to take action pursuant to options (I) or (II) above (thereby constructively electing option (III)), amendment of the specification to renumber the pages consecutively and cancel incomplete sentences caused by any omitted page(s), and/or amendment of the specification to cancel all references to any omitted drawing(s), relabel the drawing figures to be numbered consecutively (if necessary), and correct the references in the specification to the drawing figures to correspond with any relabelled drawing figures, is required. Any drawing changes should be accompanied by a copy of the drawing figures showing the proposed changes in red ink. Such amendment and/or correction to the drawing figures, if necessary, should be by way of preliminary amendment submitted prior to the first Office action to avoid delays in the prosecution of the application.

A copy of this notice MUST be returned with the reply.


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Initial Patent Examination Division (703) 308-1202

PART 3 - OFFICE COPY



UNITED STATES PATENT AND TRADEMARK OFFICE

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| APPLICATION NUMBER | FILING DATE | GRP ART UNIT | FIL FEE REC'D | ATTY. DOCKET NO | DRAWINGS | TOT CLAIMS | IND CLAIMS |
|--------------------|-------------|--------------|---------------|-----------------|----------|------------|------------|
| 09/922,283 | 08/03/2001 | 3662 | 355 | | 5 | 4 | 1 |

RINES AND RINES
81 North State Street
Concord, NH 03301

CONFIRMATION NO. 9705

FILING RECEIPT



OC000000006554347

Date Mailed: 09/14/2001

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Paul R. Johannessen, Lexington, MA;

Assignment For Published Patent Application

Megapulse, Inc.;

Domestic Priority data as claimed by applicant

Foreign Applications

If Required, Foreign Filing License Granted 09/11/2001

Projected Publication Date: To Be Determined - pending completion of Corrected Papers

Non-Publication Request: No

Early Publication Request: No

** SMALL ENTITY **

Title

Method of high-power switching and switch apparatus for frequency modulation within Loran-C signals

Preliminary Class

Monica Young

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342

Data entry by : SEYOUM, MENGISTU

Team : OIPE

Date: 09/14/2001

[REDACTED]

**LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15**

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

PLEASE NOTE the following information about the Filing Receipt:

- The articles such as "a," "an" and "the" are not included as the first words in the title of an application. They are considered to be unnecessary to the understanding of the title.
- The words "new," "improved," "improvements in" or "relating to" are not included as first words in the title of an application because a patent application, by nature, is a new idea or improvement.
- The title may be truncated if it consists of more than 500 characters (letters and spaces combined).
- The docket number allows a maximum of 25 characters.
- If your application was submitted under 37 CFR 1.10, your filing date should be the "date in" found on the Express Mail label. If there is a discrepancy, you should submit a request for a corrected Filing Receipt along with a copy of the Express Mail label showing the "date in."
- The title is recorded in sentence case.

Any corrections that may need to be done to your Filing Receipt should be directed to:

Assistant Commissioner for Patents
Office of Initial Patent Examination
Customer Service Center
Washington, DC 20231

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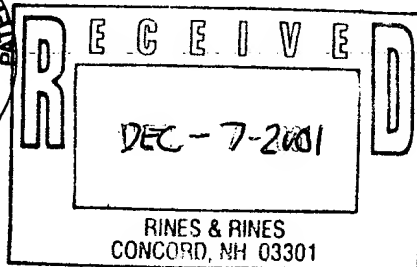
| APPLICATION NUMBER | FILING/RECEIPT DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKET NUMBER |
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09/922,283

08/03/2001

Paul R. Johannessen

RINES AND RINES
81 North State Street
Concord, NH 03301



CONFIRMATION NO. 9705

FORMALITIES LETTER



OC000000007146796

Date Mailed: 12/03/2001

NOTICE OF INCOMPLETE REPLY (NONPROVISIONAL)

Filing Date Granted

The U.S. Patent and Trademark Office has received your reply on 08/03/2001 to the Notice to File Missing Parts (Notice) mailed 09/14/2001 and it has been entered into the nonprovisional application. The reply, however, does not include the following items required in the Notice.

The period of reply remains as set forth in the Notice. You may, however, obtain EXTENSIONS OF TIME under the provisions of 37 CFR 1.136 (a) accompanied by the appropriate fee (37 CFR 1.17(a)).

A complete reply must be timely filed to prevent ABANDONMENT of the above-identified application.

The application is informal since it does not comply with the regulations for the reason(s) indicated below.

The required item(s) identified below must be timely submitted to avoid abandonment:

- Substitute drawings in compliance with 37 CFR 1.84 because:
 - drawing sheets do not have the appropriate margin(s) (see 37 CFR 1.84(g)). Each sheet must include a top margin of at least 2.5 cm. (1 inch), a left side margin of at least 2.5 cm. (1 inch), a right side margin of at least 1.5 cm. (5/8 inch), and a bottom margin of at least 1.0 cm. (3/8 inch);

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*A copy of this notice **MUST** be returned with the reply*

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